

### WPS DESIGNATION CODES AND NOMENCLATURE

W/BPS	-	XXXX	-	X	-	X	
							Supplemental Designations
							Material P Group or Equivalent, i.e., ASTM, AISI, SAE, etc.
							Welding Process and Gas Composition when applicable
							Welding / Brazing Procedure Specification, W or B

### NOMENCLATURE

- For welding/brazing purposes, material groups are given a P Number when equivalent chemistry is available, and the WPS is developed for multiple code use. ASME materials are utilized whenever possible or when dictated by engineering requirements.

- |      |      |                            |
|------|------|----------------------------|
| 1000 | SMAW | Shielded Metal Arc Welding |
| 20X0 | GTAW | Gas Tungsten Arc Welding   |
| 30X0 | GMAW | Gas Metal Arc Welding      |
| 35X0 | FCAW | Flux Core Arc Welding      |
| 4000 | PAW  | Plasma Arc Welding         |
| 5000 | SAW  | Submerged Arc Welding      |
| 6000 | OFW  | Oxyfuel Welding/Brazing    |
| 7000 | TF   | Thermal Fusion – Plastic   |
| 8000 | CAW  | Carbon Arc Welding         |
| 9000 | STUD | Automatically Timed Arc    |

#### Gas Shielding:

XX01 = CO<sub>2</sub> 100%  
 XX02 = Argon 98% / Oxygen 2%  
 XX03 = Argon 75% / CO<sub>2</sub> 25%  
 XX04 = Argon 71% / He 25% / CO<sub>2</sub> 4%  
 XX05 = Argon 79% / He 18% / CO<sub>2</sub> 3%  
 XX06 = He 90% / Argon 7.5% / CO<sub>2</sub> 2.5%  
 XX07 = He 100%  
 XX08 = Argon 90% / He 10%  
 XX09 = Argon 99% / O<sub>2</sub> 1%  
 XX00 = No Gas Shielding (SMAW/SAW/OFW/TFW/STUD/FCAW)  
 XX10 = 100% Argon (GTAW/GMAW/PAW)  
 XX11 = Argon 95% / CO<sub>2</sub> 5%  
 XX12 = Argon 75% / CO<sub>2</sub> 20% / O<sub>2</sub> 5%  
 XX13 = Helium 80% / Argon 20%

- Combination materials and welding processes will be indicated by the “ / ” symbol.

- Supplemental designations:

F4X = Group/Nickel and Nickel Base Filler

Materials

F3X = Group/Copper and Copper alloy Filler

Materials

C = Cast Iron Materials

R = Reinforcing Steel for Concrete Structures

T = Plastic pipe

1/xx = Brazing Filler Materials

A = Automatic Machine Welding

AC = Alternating Current

DC = Direct Current

SP = Spray Transfer

SC = Short Circuit Transfer

P = Pulsed